4087
4087a

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

# DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. ..... Office No. 4087 & A

LOCALITY

State Maine

General locality Portsmouth to

Locality Portland

1919

CHIEF OF PARTY

J. H. Hawley

LIBRARY & ARCHIVES

DATE .....

B-1870-1 (1)++

4087
4087a

4087A 4087



Department of Commerce and Labor

COAST AND GEODETIC SURVEY

E. Lester Jones

*Superintendent.*

*State:* Maine

# DESCRIPTIVE REPORT.

Hydrographic (w. d.) *Sheet No.* 4087 + 4087a

LOCALITY:

Portsmouth to Portland

1919

CHIEF OF PARTY:

J.H.Hawley

11—4645

4087 4087A 4087 4087A 4087 4087A 4087 4087A

DESCRIPTIVE REPORT

To accompany hydrographic sheet No. 1 & 1a

Hyd. 4087 & 4087a

This sheet shows the wire drag work executed by Wire drag party No. 2 in 1919, extending from Cape Neddick to the vicinity of Cape Porpoise. This work overlaps the work to the southward on sheet 3974 done by the party in 1919 and by party No. 1 in 1917.

Numerous changes in charted depths were discovered but none of the shoals found are dangerous to surface navigation. The local names of three of the shoals found; Pelloc Rock, Shoal Rock, and The Acre, are shown on the sheet. Referred

The drag was tested during the course of the work at frequent intervals and the tests are entered according to time on the left hand page of the wire drag records. These tests are indicated either by the words "drag test" or by the letter U.T.

The standard color scheme was used for indicating drag depths as follows:

| | |
|---|---|
| 19 feet and under | Brown |
| 20 to 29 feet | Yellow |
| 30 to 39 feet | Blue |
| 40 to 59 feet | Red |
| 60 to 79 feet | Purple |
| 80 feet and over | Orange |

Tides were observed on a staff at Cape Porpoise, Maine for the reduction of the work on this sheet. The effective depths shown on the sheet from A day to U day are greater than those actually obtained by from 0 to 1/2 foot (see note on page 3 of wire drag record Vol. 1).

Sheet 1a.

This sheet is a tracing of the projection of sheet No. 1 on which is plotted the supplemental soundings obtained during the course of the drag work.

These soundings were obtained by the tender which was equipped with a registering sheave and secured vertical casts at certain buoys while the drag was under way. These soundings are recorded on separate pages of the smooth sounding records in the following order: Number of buoy at which sounding was obtained - time - depth in fathoms.

On the opposite page the entries show the position of the drag at the time when each sounding was obtained. Thus on page 7 of sounding record Vol. 1 the first sounding was obtained at buoy F when this buoy had traversed 0.1 of the distance between positions 2 & 3; the second sounding at buoy No. 5 when the drag had traversed 0.75 of the distance between positions 2 & 3, etc.

J.H.Hawley

J.H.Hawley,
Chief of Party.

# STATISTICS SHEET NO. 1 (field number)

| Day | Date 1919 | Vol. | Drag Length feet | Miles Statute | Positions | Soundings On shoals | Soundings Sup. |
|---|---|---|---|---|---|---|---|
| A | July 1 | 1 | 4000 | 4.0 | 24 | 1 | 0 |
| B | " 3 | 1 | 4000 | 3.75 | 17 | 2 | 0 |
| C | " 7 | 1 | 5000 | 8.5 | 37 | 2 | 0 |
| D | " 8 | 1 | 5000 | 4.5 | 18 | 0 | 0 |
| E | " 9 | 1 | 5000 | 4.5 | 23 | 3 | 0 |
| F | " 12 | 1 | 5000 | 5.5 | 30 | 0 | 0 |
| G | " 14 | 1 | 5000 | 8.7 | 36 | 0 | 0 |
| H | " 17 | 1 | 5000 | 2.0 | 12 | 2 | 0 |
| J | " 24 | 2 | 5000 | 7.6 | 42 | 2 | 45 |
| K | " 25 | 2 | 5000 | 11.5 | 61 | 1 | 47 |
| L | " 26 | 2 | 6000 | 7.3 | 32 | 0 | 41 |
| M | " 28 | 2 | 5000 | 4.0 | 28 | 2 | 24 |
| N | " 30 | 2 | 12000 | 6.4 | 29 | 0 | 42 |
| O | " 31 | 2 | 6000 | 8.2 | 36 | 0 | 42 |
| P | Aug. 2 | 2 | 5000 | 6.0 | 32 | 4 | 32 |
| Q | " 6 | 3 | 5000 | 3.5 | 26 | 2 | 26 |
| R | " 9 | 3 | 5000 | 8.0 | 31 | 0 | 46 |
| S | " 11 | 3 | 5000 | 9.2 | 39 | 0 | 44 |
| T | " 12 | 3 | 5000 | 6.5 | 38 | 2 | 47 |
| U | " 13 | 3 | 5000 | 6.5 | 44 | 0 | 59 |
| V | " 16 | 3 | 4000 | 5.0 | 37 | 1 | 0 |
| W | " 21 | 4 | 4000 | 8.4 | 47 | 2 | 0 |
| X | " 23 | 4 | 5000 | 6.0 | 31 | 0 | 43 |
| Y | " 25 | 4 | 5000 | 5.0 | 29 | 3 | 37 |
| Z | " 26 | 4 | 5000 | 7.0 | 38 | 1 | 46 |
| A' | " 27 | 4 | 12000 | 5.4 | 25 | 0 | 35 |
| B' | " 28 | 4 | 6000 | 8.5 | 33 | 0 | 0 |
| C' | " 29 | 4 | 4000 | 7.0 | 51 | 1 | 0 |
| D' | Sept. 4 | 5 | 5000 | 7.0 | 34 | 0 | 39 |
| E' | " 5 | 5 | 6000 | 8.0 | 40 | 2 | 37 |
| F' | " 6 | 5 | 5000 | 4.5 | 24 | 3 | 21 |
| G' | " 8 | 5 | 5000 | 5.7 | 33 | 0 | 42 |
| H' | " 15 | 5 | 5000 | 8.5 | 50 | 3 | 49 |
| J' | " 16 | 5 | 5000 | 3.0 | 24 | 0 | 23 |
| K' | " 17 | 5 | 5000 | 6.0 | 50 | 0 | 30 |
| L' | " 23 | 6 | 4000 | 5.5 | 46 | 1 | 15 |
| M' | " 29 | 6 | 4000 | 3.5 | 38 | 2 | 18 |
| N' | Oct. 2 | 6 | 4000 | 7.0 | 46 | 0 | 0 |
| O' | " 7 | 6 | 6000 | 7.7 | 37 | 0 | 41 |
| P' | " 8 | 6 | 5000 | 5.6 | 40 | 2 | 51 |
| Q' | " 11 | 6 | 4000 | 7.0 | 58 | 1 | 0 |

STATISTICS SHEET NO. 1 (field number)



| Day | Date 1919 | Vol. | Drag Length feet | Miles Statute | Positions | Soundings on Shoals | Soundings Sup. |
|---|---|---|---|---|---|---|---|
| R' | Oct. 13 | 7 | 4000 | 9.0 | 64 | 1 | 37 |
| S' | " 17 | 7 | 5000 | 7.7 | 39 | 2 | 47 |
| T' | " 18 | 7 | 6000 | 9.5 | 47 | 0 | 38 |
| U' | " 21 | 7 | 3600 | 2.7 | 18 | 1 | 0 |
| V' | " 23 | 7 | 6000 | 7.5 | 39 | 0 | 38 |
| W' | " 24 | 7 | 4000 | 8.5 | 66 | 4 | 29 |
| X' | " 27 | 8 | 3200 | 5.0 | 26 | 0 | 0 |
| Y' | " 29 | 8 | 6000 | 10.0 | 38 | 0 | 50 |
| Z' | " 30 | 8 | 5000 | 6.5 | 27 | 0 | 43 |
| | | | | 324.0 | 1810 | 53 | 1304 |

Signals Used On Hydrographic (wire drag)
Sheet No. 1 (field number)

| Hydrographic name | Triangulation stations |
|---|---|
| Bet | Cape Elizabeth East L.H. 1904 |
| Age | Stage I. Monument, 1905 |
| Wood | Wood I. L.H., 1850 |
| Mon | Geo. Emmons Ho. W/ apex, 1868 |
| Tag | Stage Island, 1850 |
| Por | Cape Porpoise Meth Ch. sp., 1903 |
| Goat | Goat I. L. H., 1903 |
| Inn* | Stone Haven Inn flagstaff 1903 |
| Bun | Kennebunkport Orthodox Ch. sp., 1851 |
| Ken | " Baptist " " 1851 |
| Wen | Wentworths cupola, 1868 |
| Wel | Wells ch. sp., 1851 |
| Fish | Fishing rock spindle, 1868 |
| Con | South Cong. ch. sp., 1868 |
| Cup | Cliff House cupola, 1903 |
| Pas | Passaconaway Inn cupola, 1903 |
| Ned | Cape Neddick L.H., 1903 |
| Boon | Boon I. L.H., 1903 |

Located by sextant cuts

| | | | |
|---|---|---|---|
| Gab | See page 6 | Angles record | |
| Hoy | " " 8 | " " | |
| Dub | " " 14 | " " | |
| Wal | " " 12 | " " | |
| Port | " " 7 | " " | |
| Rit | " " 4 | " " | |
| Tan | " " 3 | " " | |
| Red | " " 2 | " " | |
| Cot | " " 11 | " " | |
| Bil | " " 1 | " " | Whistle and gas buoy B I L |
| Pipe | " " 5 | " " | |

* Flagstaff which was near south gable of the inn has been removed. Gable of Inn used of angling.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
Form 583

Sheet No2

# PROGRESS CHART

SHOWING CONDITION OF RECORDS OF

Hydrographic Sheet No. _____ Field No. 1

Wire drag survey of Coast of Maine - Portsmouth to Portland

Scale 1:40,000 Date of Survey 1919 - July to

Surveyed by Wire Drag Party No. 2, J. H. Hawley, Chief.

| Day | DATE | Signaled angles compared | Distances entered | Distances checked | Length of upright entered | Length of upright checked | Correction entered | Correction checked | Drag depth entered | Drag depth checked | Reducers entered | Reducers checked | Effective depth entered | Effective depth checked | Effective depth diagram entered | Effective depth diagram checked | Positions plotted | Dragged track traced | Tracing checked | Area subdivided | Subdivision checked | Transferred and inked | Compared with chart |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B' | August 28 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | ✓ | |
| C' | " 29 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | ✓ | |
| D' | Sept. 4 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | ✓ | |
| E' | " 5 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | ✓ | |
| F' | " 6 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | ✓ | |
| G' | " 8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | ✓ | |
| H' | " 15 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | ✓ | |
| J' | " 16 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | ✓ | |
| K' | " 17 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | ✓ | |
| L' | " 23 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | ✓ | |
| M' | " 29 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | ✓ | |
| N' | Oct 2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | ✓ | |
| O' | " 7 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | ✓ | |
| P' | " 8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | ✓ | |
| Q' | " 11 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | ✓ | |
| R' | " 13 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | ✓ | |
| S' | " 17 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | ✓ | |
| | " 18 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | ✓ | |
| U' | " 21 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | ✓ | |
| V' | " 23 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | ✓ | |
| W' | " 24 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | ✓ | |
| X' | " 27 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | ✓ | |
| Y' | " 29 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | ✓ | |
| Z' | " 30 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | ✓ | |

This Progress Chart, checked to show the condition of the office work, should be forwarded to the office with the records.

11—6061

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
Form 583

# PROGRESS CHART

SHOWING CONDITION OF RECORDS OF

Hydrographic Sheet No. _____ Field No. 1

Wire drag survey of Coast of Maine — Portsmouth to Portland

Scale 1:40,000 Date of Survey 1919 - July to

Surveyed by Wire Drag Party No. 2, J.H. Hawley, Chief

| Day | DATE | Signaled angles compared | Distances entered | Distances checked | Length of upright entered | Length of upright checked | Correction entered | Correction checked | Drag depth entered | Drag depth checked | Reducers entered | Reducers checked | Effective depth entered | Effective depth checked | Effective depth diagram entered | Effective depth diagram checked | Positions plotted | ~~Dragged strip traced~~ | ~~Tracing checked~~ | Area subdivided | ~~Subdivision inspected~~ | Transferred and inked | Compared with chart |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A | July 1 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | ✓ | |
| B | " 3 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | ✓ | |
| C | " 7 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | ✓ | |
| D | " 8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | ✓ | |
| E | " 9 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | ✓ | |
| F | " 12 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | ✓ | |
| G | " 14 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | ✓ | |
| H | " 17 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | ✓ | |
| J | " 24 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | ✓ | |
| K | " 26 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | ✓ | |
| L | " 26 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | ✓ | |
| M | " 28 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | ✓ | |
| N | " 30 | K positions copied ✓ | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | ✓ | |
| O | " 31 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | ✓ | |
| P | August 2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | ✓ | |
| Q | " 6 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | ✓ | |
| R | " 9 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | ✓ | |
| S | " 11 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | ✓ | |
| | " 12 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | ✓ | |
| U | " 13 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | ✓ | |
| V | " 16 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | ✓ | |
| W | " 21 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | ✓ | |
| X | " 23 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | ✓ | |
| Y | " 25 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | ✓ | |
| Z | " 26 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | ✓ | |
| A' | " 27 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | ✓ | |

This Progress Chart, checked to show the condition of the office work, should be forwarded to the office with the records.

11—6061

ADDRESS THE SUPERINTENDENT
U. S. COAST AND GEODETIC SURVEY

AND REFER TO NO. 41-EMK

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
WASHINGTON

FIELD RECORDS (C)

January 7, 1920.


Division of Hydrography and Topography:

Division of Charts:

Tidal reductions have been approved in
10 volumes of Wire Drag and Sounding records for

HYDROGRAPHIC SHEET 4087

Coast of Maine, Portsmouth to Portland
J. H. Hawley in 1919

Plane of reference is
Mean low water, reading

2.7 ft. on tide staff at Cape Porpoise, Me.

Records as received from field were in good condition. Some of the reductions had apparently not been checked but otherwise the records were very satisfactory.

G Rude

Chief, Section Tides
and Currents.

Recommend approval:

W G Parker

Chief, Div. of Hyd'y & Top'y.

Verification Report of Hydrographic Sheet 4087 & 4087a

All of the area is apparently well covered with the exception of the spits as designated on Tracing No. 1. The existing charts covering this area show no indications of dangers near any of these spits so they need not be considered as serious omissions.

Due to a correction of the tide staff as noted by Capt. Hawley, a revision of the tide values was necessary affecting the work as plotted from A & H daysheet. All of the revised or corrected depths were then corrected on the smooth sheet. There were 189 of these changes affecting the length and depth of strip. The plotting besides this was of a poor nature. Due to the draftsman's lack of knowledge of the work or due to carelessness the effective depth diagrams in a large percentage of the cases were plotted erroneously. In two or three cases also wrong colors as designating effective depths were used.

In sheet "a" of this work are shown the supplemental soundings. There is a remarkable agreement among the overlapping soundings taken on different days. The whole area is closely sounded. As in the other sheet the soundings from A & H days were corrected due to the revision of the tide values of the 529 soundings covered by these days 229 were corrected

work was

according to the revised work. The plotting of this better than on the other. However a common mistake which frequently occurred was the plotting of a sounding which fell along the line of the N buoy which should be plotted along the line of the S buoy or vice versa. A few other corrections were made.

All of the records were very well kept.

Respectfully submitted.

Alois Bau.

Draftsman.

# TIDAL DATA

## Wire Drag Hydrogaphic Sheet No. 1 (field number)

Tide gauge at Cape Porpoise, Maine.

Plane of reference - mean low water.

Soundings in feet at mean low water.

| | Gauge reading |
|---|---|
| Highest tide observed | 10.9 feet |
| Lowest tide observed | -1.3 feet |
| Mean low water | 2.7 feet |

E.P.E.

ADDRESS THE DIRECTOR
U. S. COAST AND GEODETIC SURVEY

AND REFER TO No. 4-DRM

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
WASHINGTON

June 11, 1923.

SECTION OF FIELD RECORDS

Report on Wire Drag Sheet No. 4087

Surveyed in 1919.

Chief of Party, J. H. Hawley.

Surveyed by J. H. Hawley. Instructions dated June 17, 1919.

Protracted by R. L. Horne, N. November, C. J. Itter, A. M. Weber.

Inked by R. L. Horne, A. M. Weber.

Verified and Area and Depth Sheet by A. Baer.

1. The records for this sheet were very well kept and conform to the requirements of the General Instructions.

2. The methods and character of operations fulfill the requirements of the General Instructions.

3. The depth and extent of dragging satisfy the specific instructions except that the drag should have been carried to the three fathom curve where possible. Also the outer limit of the drag failed to include the 40-fathom curve in the area due east and south of east of Cape Porpoise. Care should have been taken to include this area as the chart shows two soundings of 23 and 25 fathoms about 1 mile outside the limits of the drag. The original hydrographic sheet shows additional shoal soundings in this vicinity proving the existence of a shoal in this locality. The 23-fathom spot mentioned above lies 6 1/2 miles 111° (true) from Cape Porpoise. The 25-fathom spot lies 1 mile south of the 23-fathom sounding.

4. A clearance depth was obtained over all shoals discovered sufficient to insure safety to surface navigation in this particular locality with the following exceptions:

| Locality | Smooth sheet position | Depth of drag at grounding | Sounding obtained | Remarks. |
|---|---|---|---|---|
| 2 1/2 mi. 96° (true) of Curtis Cove | 16Q | 81 | 78 | |
| 2 1/2 mi. 106° (true) of Curtis Cove | 11Q | 84 | 73 | |
| 1 mi. S.E. of Curtis Cove | 42W[1] | 48 | 26 | |
| 1 1/4 mi. N. of Bibb Rock | 29M[1] | 34 | 30 | |
| 1/2 mi. S. of Bibb Rock | 43W | 35 | 29 | Chart shows 9 fathoms between this spot and Bibb Rock. |
| 900 m. S.E. of Cape Neddick. | 16C[1] | 51 or 58 | 59 | Insufficient overlap at this point with adjoining sheet. |
| 6 1/4 mi. 95° (true) of Bibb Rock | 30L | 102 | 95 | Probably cleared by a 67-foot drag. |

The 62, 63, and 44-foot soundings at the southern limits of this sheet shown as not dragged over were covered in the work of 3974.

5. The supplemental hydrography is suitable for correcting the charts only in places where there are extended blank areas. Otherwise, by order of the Chief, Division of Charts, the supplemental hydrography shall be disregarded.

6. The overlaps within the sheet are sufficient but where this sheet joins W. D. 3974 just southeast of Cape Neddick and where 59 feet was found (as mentioned in paragraph 4) there should be a greater overlap.

7. There are several splits on this sheet, all shown on the Area and Depth Sheet. With the exception of a split near the southern limit of the work, all the splits are a result of the drag grounding and failure to obtain a clearance depth. Additional work will therefore be required to cover the places mentioned in paragraph 4.

8. The field plotting was completed to the extent prescribed in the General Instructions with the exception that the depth curves were carelessly plotted and that wrong colors were used to designate effective depths. These had to be corrected by the office draftsman. The plotting of the supplemental hydrography was in some cases also carelessly done such as the plotting of a sounding, which was erroneously plotted should fall along the line of the N buoy, along the line of the F buoy and vice versa.

9. Rating of the work (a. Character and scope of drag operations - fair.
(b. Field drafting - fair.

10. Attention is called to the fact that some of the shoal soundings discovered by the drag were not shown on the latest edition of Chart 1205.

11. Reviewed by A. L. Shalowitz, June, 1923.

Form 537
11—5812

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

# HYDROGRAPHIC TITLE SHEET

**Wire Drag**

The finished Hydrographic Sheet is to be accompanied by the following title sheet, filled in as completely as possible, when the sheet is forwarded to the Office.

U. S. Coast and Geodetic Survey.

Register No. 4087 No. 1

State . . **Maine** . . . . . .

General locality . . **Coast of Maine.** . . . . . .

Locality . . ~~**Portsmouth, N.H. to Portland, Me.**~~ *Saco River to Cape Neddick* . . . . . .

Chief of party . . . . **J.H.Hawley** . . . . . .

Surveyed by . . . . . **Wire Drag Party No. 2** . . . . . .

Date of survey . . . . **July to October, 1919** . . . . . .

Scale . . . . . **1/40,000** . . . . . .

Soundings in . . . **Feet** . . . . . .

Plane of reference **Mean Low Water** . . . . . .

Protracted by **R.L.H., N.N., C.J.I., A.M.W.** Soundings in pencil by **J.H.H.**

Inked by **R.L.H., A.M.W.** Verified by . . . . . .

Records accompanying sheet (check those forwarded):

✓ Des. report, **4** ✓ Tide books, ..... Marigrams, **1** ✓ Boat sheets,

**2** ✓ Sounding books, **8** ✓ Wire-drag books, ..... Photographs.

**1 Angle book**

Data from other sources affecting sheet . . . . . .

Remarks:

Form 537
11—5812

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

# HYDROGRAPHIC TITLE SHEET

The finished Hydrographic Sheet is to be accompanied by the following title sheet, filled in as completely as possible, when the sheet is forwarded to the Office.

U. S. Coast and Geodetic Survey.

Register No. ~~40~~ 4087 a

State . . . Maine . . . . . .

General locality . Coast of Maine . . . . . .

Locality . . . . ~~Portsmouth, N.H. to Portland, Me.~~ Saco River to Cape Neddick. . . . . .

Chief of party . . . . . J.H.Hawley . . . . . .

Surveyed by . . . . . Wire Drag Party No. 2 . . . . . .

Date of survey . . . . July to October, 1919 . . . . . .

Scale . . . . . 1/40,000 . . . . . .

Soundings in . . . Feet . . . . . .

Plane of reference . . Mean Low Water . . . . . .

Protracted by . . . . . Soundings in pencil by R.L.H., W.P.D.

Inked by R.L.H., W.P.D. . Verified by . . . . . .

Records accompanying sheet (check those forwarded):

Des. report, ..... Tide books, ..... Marigrams, ..... Boat sheets,

..... Sounding books, ..... Wire-drag books, ..... Photographs.

Data from other sources affecting sheet . . . . . .

Remarks:

Tracing of sheet No. 1..... showing supplemental soundings obtained while dragging.